DEPARTMENT OF PESTICIDE REGULATION FUNCTIONAL OPERATION PLAN 2006/2007

Pesticide Registration

Pesticide registration is the scientific, legal, and administrative evaluation process of a pesticide product before it can be sold or used in California. The registration process also includes special registration activities such as reviewing and issuing research authorizations; reviewing and issuing emergency exemption Section 18 products; reviewing and registering structural pest control devices; and consulting with the U.S. Environmental Protection Agency (U.S. EPA) on federal registration issues.

Performance Goal 1: Process 6,000 actions on submissions.

- 1. Reach a registration decision on approximately 10 new active ingredients (depending on the number of new active ingredients received) within an average of one year of submission of a complete evaluation package.
- 2. Reach a registration decision on products containing currently registered active ingredients within an average of six months of submission of a complete package.
- 3. Evaluate 20 Section 18 requests.
- 4. Evaluate 550 research authorizations.
- 5. Evaluate 20 Special Local Needs.

Performance Goal 2: Complete the license renewal of 8,000-10,000 pesticide products by February 1, 2007.

Performance Goal 3: Reduce workload and increase efficiency.

- 1. Conduct Department of Pesticide Regulation (DPR)-sponsored conference by September 2007.
- 2. By April 2007, track and report workload changes in the data evaluation process as a result of the implementation of Assembly Bill (AB) 1011.

Performance Goal 4: Continue to develop work share programs with U.S. EPA.

Risk Assessment

Risk assessment is a process designed to answer questions about a chemical's toxicity, what exposure results from its various uses, what the probability is that it will cause harm, and how to characterize the risk. Risk assessment can be broken down into four steps: (1) hazard identification; (2) dose-response assessment; (3) exposure assessment; and (4) risk characterization. DPR takes a comprehensive approach to risk assessment and assesses potential dietary, workplace, residential, and school areas, and ambient air exposures. Risk assessment is often the driving force behind new regulations and other use restrictions. Risk assessment also includes special toxicology review activities, such as reviewing emergency determinations of potential human impacts resulting from illegal residues of pesticides on agricultural commodities, and coordinating Proposition 65 activities with the Office of Environmental Health Hazard Assessment (OEHHA).

Performance Goal 1: Complete six risk assessments under Senate Bill (SB) 950, AB 2161, or AB 1807 during fiscal year 2006-07.

Performance Goal 2: Annually publish prioritization list for comprehensive risk assessments and initiate assessments according to DPR's risk assessment prioritization and initiation process.

Licensing and Certification

Licensing and Certification is DPR's process of ensuring that persons selling, possessing, storing, handling, applying, and recommending the use of pesticides are competent and knowledgeable in their safe use. DPR examines and licenses commercial pest control applicators, aerial applicators, pest control dealer designated agents, and pest control advisers; and certifies pesticide applicators that use or supervise the use of restricted pesticides to ensure this competency. Such licenses and certificates cannot be renewed unless the holder has completed certain minimum continuing education hours related to pesticides or pest management within each two-year license or certificate period. This provides the licensee and certificate holders with updates in pesticide laws and regulation, new pest control application technology, and pest management techniques. Licensing and Certification also licenses pest control businesses, maintenance gardener pest control businesses, pesticide brokers, and pest control dealers.

Performance Goal 1: Administer the Licensing and Certification Program.

- 1. Process approximately 12,000 license and certificate applications (new and renewals).
- 2. Administer approximately 6,000 exams.
- 3. Notice the amendment to the licensing regulations addressing the minimum qualifications for new pest control advisers by June 2006.
- 4. Accredit approximately 1,500 continuing education courses and audit approximately 10 courses.
- 5. Implement the revised Laws and Regulations examination by August 2006.
- 6. Release the new Landscape Maintenance Pest Control study guide and examination question pool for the qualified applicator landscape maintenance category by July 2006.
- 7. Finalize the new Maintenance Gardener Pest Control Category study guide and examination question pool by June 2006 and release it by January 2007.
- 8. Complete the system requirements specifications; evaluate vendor software; and complete the software procurement for the Licensing and Certification Data Migration Project by Fall 2006.
- 9. Negotiate and finalize a multi-year interagency agreement with the University of California, Integrated Pest Management (IPM) Program to provide ongoing cooperative services to support the licensing program by August 2006.
- 10. Complete the development of the Aerial Applicator Study Guide and Examination Question Pool by July 2006.

Permitting and Pesticide Use Reporting

Permitting is an ongoing program to assess, evaluate, and mitigate the use of restricted materials (California Environmental Quality Act equivalency). Pesticide use reporting is an ongoing program to collect and process data on full use reporting of agricultural and structural pesticide applications, per the Food Safety Act of 1989 (Chapter 1200, AB 2161). Under full use reporting, certain agricultural pesticide uses are required to be reported to the county agricultural commissioner (CAC), who, in turn, reports the data to DPR. DPR also collects reports from structural pest control businesses including pesticide use in schools. Full use reports include the amount and name of the pesticide applied, date and location (section, township, range) of the application, and, if the application was agricultural, the crop. The primary exceptions to the use reporting requirements are home and garden use and most industrial and institutional use. The pesticide use reports are compiled by DPR and made available on disc and on DPR's Web site. DPR also provides support to the CACs on their administration of the computer systems and applications for the Restricted Material Permit Program, which is used to manage, track, and collect data for permits, operator identifications, and pesticide use reports.

Performance Goal 1: Administer the statewide permitting and pesticide use reporting programs.

- 1. In January 2007, publish the 2005 Annual Pesticide Use Report, including major categories.
- 2. Support the ongoing administration of the restricted material permit and pesticide use reporting program.

Monitoring/Surveillance (Continuous Evaluation)

Monitoring/surveillance is an ongoing process to determine the fate of pesticides, protecting the public and the environment from pesticide contamination through analyzing hazards, and developing pollution prevention strategies. Monitoring/surveillance program activities include ground water monitoring, surface water monitoring, air quality monitoring, pesticide illness surveillance, produce surveillance, and special monitoring programs such as pest management and eradication, environmental fate, and human exposure monitoring projects. The monitoring of pesticide residues in food is also a major component of the monitoring/surveillance activities.

Performance Goal 1: Monitor pesticide residues in food.

- 1. State residue monitoring: Collect 3,575 samples.
- 2. Pesticide Data Program: Collect 2,700 samples.
- 3. Microbiological Data Program: Collect 850 samples.
- 4. Compile 2006 Annual Residue Summary: Post to Web site by June 2007.

Performance Goal 2: Evaluate pesticides in air.

- 1. Update inventory of volatile organic compound (VOC) emissions from pesticides.
- 2. Evaluate 40 pesticides and other environmental contaminants in the rural, farming community of Parlier.
- 3. Pursuant to the Toxic Air Contaminant Act, evaluate eight pesticides as potential environmental contaminants (acrolein, sodium tetrathiocarbonate, methidathion, sulfuryl fluoride, carbofuran, chloropicrin, iodomethane, dazomet).

Performance Goal 3: Evaluate pesticides in ground water.

- 1. Evaluate and investigate the potential for pesticides not previously detected in California's ground water.
- 2. Evaluate the Leaching Evaluation and Chemistry Model for use of determining pesticide fate in California and compare accuracy to other models using field data.
- 3. Develop geographic information systems layer information and apply the information to investigate further contamination of detected pesticides on the 6800(a) list (atrazine, simazine, bromacil, diuron, prometon, bentazon, and norflurazon).
- 4. Produce annual Well Inventory Report: Pesticide Contamination Prevention Act.

Performance Goal 4: Evaluate pesticides in surface water.

- 1. Evaluate 24 pesticides as potential environmental contaminants (esfenvalerate, permethrin, bifenthrin, cyfluthrin, cypermethrin, lambda-cyhalothrin, azinphosmethyl, chlorpyrifos, diazinon, DDVP, disulfoton, ethoprop, fenamidophos, fonofos, dimethoate, methidathion, malathion, methyl parathion, phosmet, phorate, prophenofos, tribufos, simazine, and diuron).
- 2. Produce annual update of the surface water database.
- 3. Produce geographic information systems and mathematical models for vulnerable areas to runoff and mitigation assessment.

Performance Goal 5: Evaluate human exposures to pesticides.

- 1. Occupational exposures:
 - a. Initiate one new worker exposure monitoring study.
 - b. Conduct dermal exposure monitoring of 30 cotton and tomato irrigators to oxamyl residues, and complete a draft report.
 - c. Complete the scientific evaluation of phosphine-generating compounds. Follow-up on recommendations made in the phosphine evaluation report.
- 2. Pesticide Illness Surveillance Program (PISP):
 - a. Complete 1,200-pesticide episode case reviews and evaluations, and prepare the 2005 annual report of pesticide-related illnesses and injuries.
 - b. Provide consultation to 100 stakeholders on pesticide-related health and exposure inquiries and respond to 100 query requests of the PISP database.

- c. Complete a report of one scientific evaluation of PISP and other data from 1994-2004 for applicators using hand-held equipment.
- d. Conduct an evaluation of PISP and other data from 1994-2004 to determine the reasons for violations of personal protective equipment requirements found during pesticide-related illness investigations, and complete a draft report.
- e. Through the U.S. EPA Border 2012 Project, assist Mexico's Health Department to set up a pesticide illness surveillance program.

Mitigation of Human Health Risks

Mitigation of human health risks involve developing mitigation strategies and proposals based on scientific data for pesticides that have unacceptable risks to humans associated with exposure. These may include unacceptable pesticide exposure in air, the workplace, and in food and water. Mitigation measures may include developing proposed label changes, regulations (includes rulemaking process), and placing conditions on registration. As part of the mitigation development process, efforts are placed on obtaining and providing input on mitigation proposals from both internal and external stakeholders, responding to their comments, conducting a peer review of mitigation documents, and finalizing documents for release to the public.

Performance Goal 1: Implement mitigation measures for specific pesticides.

1. Complete the mitigation process for MITC, methyl parathion, and naled; continue development of mitigation strategies for amitraz, atrazine, deltamethrin, and tralomethrin; and initiate the development of mitigation strategies for methamidophos and methidathion.

Performance Goal 2: Worker risk.

- 1. Complete the development of two rulemaking actions (closed systems and hand and eye protection).
- 2. Focus training and outreach efforts.
 - a. Participate in 15 outreach sessions with health professionals, worker advocates, commodity groups, and government agencies to address worker protection and public health issues.
 - b. Provide six training sessions on personal protective equipment, including the revised respiratory protection regulations, and industrial hygiene.
 - c. Provide two training sessions to emergency responders on handling pesticiderelated incidents.
 - d. Complete a draft pesticide safety information sheet leaflet for use as training material that focuses on hazards, routes, symptoms, and sources of pesticide exposure. Complete an evaluation of agricultural fieldworker training requirements, outreach materials, assessments of fieldworker training needs, and other sources of information prior to the development of the pesticide safety information series leaflet.

- e. Work with the community clinics in San Diego and Sonoma regions to provide outreach on pesticide safety, discuss physician-reporting requirements, and distribute copies of Recognition and Management of Pesticide Poisonings. Coordinate with MiVia to conduct physician training at clinics. Coordinate these outreach efforts with OEHHA and other agencies.
- 3. In coordination with the California Agricultural Commissioners and Sealers Association and the Department of Industrial Relations, negotiate changes to the existing memorandum of understanding.
- 4. Continue working with OEHHA and pilot counties (Fresno, Monterey, San Diego) in developing a Web-based physician reporting system.
- 5. Provide Spanish translation of outreach documents and worker safety presentations for approximately 10 documents related to environmental justice projects, community right-to-know issues, training, and health and safety.
- 6. Prepare and implement a work plan to address the recommendations developed during the review of illnesses following structural applications (HS-1854).

Performance Goal 3: Mitigating community risk.

- 1. Air Initiative Develop human health mitigation strategies and VOC emission reduction regulations for fumigants (metam-sodium/MITC-generating pesticides, methyl bromide, 1,3-dichloropropene, and chloropicrin).
- 2. Air Initiative By June 2007, develop and have accepted by the Air Resources Board to incorporate into the State Implementation Plan under the Clean Air Act, a commitment to reduce agricultural and commercial structure pesticide VOC emissions.

Mitigation of Environmental Hazards

Mitigation of environmental hazards is the process of developing strategies and proposals based on scientific data to reduce and lower the risks for pesticides that have unacceptable risks to the environment (including endangered species and phytotoxic residues) from contaminants in ground water, surface water, and air. As part of the mitigation development process, efforts are placed on obtaining and providing input on mitigation proposals from both internal and external stakeholders, responding to their comments, conducting a peer review of mitigation documents, and finalizing documents for release to the public.

Performance Goal 1: Mitigation pesticides impacts on ground water.

- 1. Identify, evaluate, and support mitigation measures for pesticides found in California ground water (including atrazine, simazine, bromacil, diuron, prometon, bentazon, and norflurazon).
- 2. Produce a report outlining outreach efforts and recommendations for continued education and potential regulatory options regarding chemigation.

- 3. Measure effectiveness of prevention and mitigation actions for use of 6800(a) listed pesticides in ground water protection areas, other statewide restricted pesticides, and chemigation educational activities.
- 4. Evaluate current backflow prevention regulations and, if necessary, propose new regulations.

Performance Goal 2: Mitigate pesticides impacts on surface water.

- 1. Support the implementation of mitigation measures for two rice pesticides (molinate and thiobencarb) and five dormant spray pesticides (chlorpyrifos, diazinon, esfenvalerate, methidathion, and permethrin).
- 2. Identify and evaluate mitigation options for three pesticides adversely affecting the environment (diazinon, chlorpyrifos, and pyrethriods) in cooperation with the State Water Quality Control Board and the regional water quality control boards.
- 3. Develop and implement mitigation measures for copper-based antifouling paints.

Performance Goal 3: Nontarget and endangered species protection.

- 1. Endangered species:
 - a. Support statewide permitting, use reporting, and geographic information systems by maintaining the Pesticide Regulations Endangered Species Custom Real-time Internet Bulletin Engine (PRESCRIBE) online database application, updates to the Endangered Species Program Web site, and ongoing support for PRESCRIBE custom bulletins.
 - b. Disseminate information pertinent to court-ordered pesticide use buffers for protection of Salmonids in California.
 - c. Develop new or revised outreach material for three to six endangered species. In the coming six months we expect to develop artwork and information for 20 to 25 endangered plant species.
 - d. Translate existing applicator training materials for endangered species identification to Spanish. Translation of materials is ongoing. Over the past six months we have translated materials for 16 species. In the coming six months we expect to translate materials for 12 species. 20,000 sets of endangered species cards in Spanish will be printed for distribution to counties, applicators, and industry groups.
- 2. Develop a state plan for protection of listed species and submit it to U.S. EPA for approval.
- 3. Consult with the U.S. Fish and Wildlife Service on protection measures for California the Red-Legged Frog.

Pest Management Programs

Pest management programs include school IPM, agricultural and urban pest management projects on high priority pesticides, IPM innovator awards, technical/scientific resource services, and outreach to stakeholders.

Performance Goal 1: School IPM: Prevent children's exposure to pesticides by facilitating adoption of IPM in schools.

- 1. Conduct four planned school IPM workshops to instruct school district staff on techniques to control pests while reducing risks.
- 2. Conduct outreach and & education (maintain Web site information, produce three interactive learning modules on pest and IPM, develop two pest fact sheets, publish a seasonal calendar of IPM activities and a poster, respond to approximately 250 inquires from schools and the public, and give approximately six seminars).
- 3. Develop a "pilot" training program for individual school districts.

Performance Goal 2: Promote pollution prevention.

- 1. Protect water quality: Prepare a summary report of Alliance Grant results and report on the IPM alternatives to watershed coalition groups; continue two grants (Pesticide Environmental Stewardship Program and Food Quality Protection Act) to educate growers on organophosphate alternatives; model IPM and best management practices combinations to determine which creates the largest theoretical reduction in pesticide runoff; assess economic and environmental measures associated with pheromone use on codling moths in walnuts; assist the State Water Resources Control Board, regional water quality control boards, and CalFed with grant funding programs (Propositions 40, 50, and 13, and 319 grants); and work with urban groups on IPM projects.
- 2. Recommend IPM Innovator Award recipients and conduct award ceremony in October 2006.
- 3. Environmental Justice Pilot Project in Parlier Promote a precautionary approach through an analysis of pest management trends that reduce pesticide risk. Staff have attended technical advisory and stakeholder meetings and prepared a draft project proposal and pesticide use information.
- 4. Promote Innovative Technologies As part of the air initiative staff will identify technologies that reduce pesticide use and risk by October.

Enforcement

Enforcement activities include establishing statewide enforcement priorities, overseeing CAC's pesticide use enforcement activities, conducting investigations, and taking enforcement action. Statewide enforcement guidance includes identifying priorities and developing a prioritization plan of performance objectives and strategies; negotiating enforcement work plans with each CAC; preparing an evaluation on the effectiveness of the county program; and consulting with CACs on the pesticide enforcement program, including investigations, researching and analyzing various compliance trends, and advising CACs of DPR policies, procedures, and developing issues. Enforcement activities include determining if an administrative civil penalty is required and sending a Notice of Proposed Action to a respondent; upon request, conducting a hearing with the

respondent; preparing findings of fact, Notice of Final Decisions, and Director's Order; signing Notice of Final Decision and Order; providing appeal procedures to the respondent; and levying a civil penalty if respondent's appeal does not lead to a reversal of the decision.

Performance Goal 1: Oversee the county pesticide use enforcement program.

- 1. Implement the County Regulatory Oversight Program:
 - a. Maintain and revise as necessary the CACs performance review process.
 - b. Complete the CAC 2005/06 performance evaluations by September 30, 2006.
 - c. Post the 2005/06 and 2006/07 county work plans on DPR's Web site by May 2007. Post the 2005/06 county performance evaluations on DPR's Web site by May 2007.
- 2. Maintain the County Oversight Inspection Program:
 - a. Conduct 221 county oversight inspections, both risk-based and neutral scheme.
 - i. Target oversight inspections by focusing on specific industry (growers, packing houses, and commodity groups), chemical groups (fumigants), equipment-uses (sprinkler applications), work activities, and/or repeat violators.
 - ii. Conduct repeat-violator inspections based on Enforcement Action Database. Analyze CAC inspection programs using information gathered through the County Oversight Inspection Program and the Inspection Tracking Database to identify and focus on common violation trends to use in field monitoring.
 - b. Analyze DPR's oversight and follow-up inspections to identify inspection efficiencies and measure program progress.
 - c. Administer the Pesticide Regulatory Activities Monthly Report, including data input, quarterly reports, and draft of final report to CACs by October 2006. Finalize report by February 2007.

Performance Goal 2: Compliance monitoring.

- 1. Conduct inspections in conjunction with the U.S.EPA Cooperative Agreement.
 - a. Conduct Pesticide Producing Establishment Inspections (60).
 - b. Conduct County Oversight Inspections.
 - i. Certified Applicators/Pesticide Dealers (10).
 - ii. Agricultural Use and Follow-up Inspections (150).
 - iii. Nonagricultural Use and Follow-up Inspections (30).
 - iv. Worker Protection Standard Tier 1 Inspections (30).
 - v. Miscellaneous Inspections (10).
 - c. Collect and analyze pesticide product samples in conjunction with the U.S.EPA Cooperative Agreement (40).
- 2. Conduct 400 Product Compliance Inspections (130 federal and 270 state).

3. Improve quality of Pesticide Episode Investigations including human illness and environmental impacts with special emphasis on Priority Investigations to address the use of restricted materials that result in a priority episode.

Performance Goal 3: Enforcement response.

- 1. Evaluate data to identify persons with repeat violations for possible state actions.
- 2. Administrative Hearings Program Complete outreach materials revisions (regulatory toolbox and Administrative Hearing Guides) for CAC staff and management acting as county advocates or hearing officers.
- 3. Ensure new Enforcement Response Policy is implemented statewide.

Performance Goal 4: State and County regulator training.

- 1. Develop, implement, and facilitate the Enforcement Branch Liaison Internal Forum.
- 2. Conduct training sessions for CAC staff statewide in the following topics:
 - a. Structural pest control training by March 2007.
 - b. Restricted materials training based on the recently revised Restricted Materials Manual to be conducted at multiple locations throughout the state.
 - c. Inspection procedures training to be conducted at multiple locations throughout the state upon completion of the revised Inspection Procedures Manual.
 - d. Enforcement Response Policy training at multiple locations statewide (July and August 2006).
 - e. Hearings and advocacy training for CAC staff.

Performance Goal 5: Special projects.

- 1. Continue development of the Pesticide Use Enforcement Program Standards Compedium and assign project lead for maintenance of each volume.
 - a. Volume 1 General enforcement information and other related programs: In development.
 - b. Volume 2 Laws and Regulations: Completed; annual revisions as necessary.
 - c. Volume 3 Restricted Materials and Permit Management: Estimated completion August 2006.
 - d. Volume 4 Inspection Procedures: Estimated completion December 2006.
 - e. Volume 5 Investigation Procedures: Completed.
 - f. Volume 6 Enforcement Guidelines: In development Spring 2007.
 - g. Volume 7 Hearings Sourcebook: Estimated completion October 2006.
- 2. Coordinate with Information Technology Branch to stabilize all Enforcement Branch databases, including Inspection Tracking database, to prepare for CACs use of Automating Reporting System.
- 3. Continue Border Coordinator activities with Mexico.
 - a. Promote communication and provide training and coordination with border region agricultural officials, growers, and fieldworkers.
 - b. Analyze residue data from produce to reduce shipments with illegal residues.

- 4. Explore development of a pesticide incident response team to include members.
- 5. Coordinate with the CAC subcommittee to analyze the Pesticide Regulatory Activities Monthly Report and use an activities-reporting form to measure performance.

Mill Assessment/Product Compliance

The focus of the mill assessment and product compliance program is to ensure products are registered prior to sales and use in California, that they are labeled correctly, and that the mill assessment fees have been paid. Mill assessment is a fee that California assesses on all pesticide sales, levied at the point of first sale into the State. A "mill" is equal to one-tenth of a cent. The mill assessment rate is established via regulation and is currently set at 21 mills, or 2.1 cents per dollar of sales. Of the 21 mills collected, 13.4 mills are allocated for State pesticide regulatory activities. This allotment represents approximately two-thirds of DPR's total funding. The remaining 7.6 mills are disbursed to the County Agricultural Commissioner (CAC) via criteria established in regulation as partial reimbursement for their pesticide use enforcement activities at the local level.

The mill assessment program is a self-assessment system. Each quarter, DPR mails reporting forms to pesticide registrants, licensed pest control dealers, and licensed pesticide brokers. Completed forms are due to DPR within 30 days of the end of the quarter. To ensure products in the channels of trade are registered and in compliance with state and federal pesticide labeling laws and regulations, and to verify the sellers are paying sufficient mill assessment, DPR staff conduct inspections and audits of registrants, dealers, brokers and retailers throughout the U.S. Sellers in violation of product compliance and/or mill assessment requirements are subject to civil penalties.

Performance Goal 1: Collect the mill assessment on a quarterly basis from the 1,700 registrants, dealers, and brokers.

Performance Goal 2: Ensure responsible parties pay legally sufficient mill assessment on sales and distribution of pesticides into or within California.

- 1. Conduct 20 registrant audits.
- 2. Conduct 10 broker/dealer audits.
- 3. Conduct 15 audits of nonlicensed entities.
- 4. Continue evaluating product movement in the channels of trade to determine the responsible party is paying mill assessment and access level of compliance.

Performance Goal 3: Ensure pesticide products sold into or within California are registered and labeled correctly.

- 1. Conduct 400 product compliance inspections. (U.S. EPA Cooperative Agreement 130, State Program 270).
- 2. Coordinate, track, and investigate 120 product related complaints.

- 3. Maintain and evaluate compliance history on company/firm(s) and products.
- 4. Develop policies and legislative or regulatory solutions to address inconsistencies and to promote equity within the regulated community.

Performance Goal 4: Pursue appropriate and consistent enforcement options and settlement agreements.

- 1. Pursue enforcement actions on 150-200 cases of unregistered or misbranded products.
- 2. Post final dispositions for settlement agreements on DPR's external Web site.

Performance Goal 5: Manage the disbursement of mill assessment funds to the CACs on an annual basis.

- 1. Prepare quarterly mill assessment projections for CACs.
- 2. Coordinate and address funding issues with CACs.